

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

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SECRETARY

JOHN AUERBACH
COMMISSIONER

07/15/2011

Michael Murawski
Assistant District Attorney, Suffolk County

Dear ADA Murawski,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Drug Analysis Laboratory Receipt.
2. Curriculum Vitae for Annie Dookhan & Lisa Glazer.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC Spectral analytical data for sample # [REDACTED]
6. GC/Mass Spectral analytical data for samples # [REDACTED]

Lisa Glazer was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Khan".

Annie Khan (Dookhan)
Chemist II
Drug Analysis Lab
Jamaica Plain, MA. 02130
(617) 983-6631
Annie.Khan@state.ma.us

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

*Maintenance and repairs of all analytical instruments.

*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

*Oversee the Quality Control/Quality Assurance program for the Drug Lab.

*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.

*Notary Public.

*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

*Writing, revising and reviewing Standard Operating Procedures (SOPs).

*Trained and supervised new chemists and interns for the department.

*Routine QC testing of products for the FDA.

*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

*Complete testing of chemicals for Vendor Validation Project for the FDA.

*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Lisa A. Glazer

Education

Bachelor of Science Degree, CHEMISTRY January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

Employment

Chemist I, II State Laboratory Institute (May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

Laboratory Technician I (August 2006 – May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 – November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units



DRUG RECEIPT

CC #

BOOK # 57

PAGE # 87

DESTRUCTION #

District/Unit A-1 Day

Name & Rank of Arresting Officer Sgt Orr Wm DUNN ID# 1006

To be completed by ECU personnel only

Name and Rank of Submitting Officer BRESNAHAN ID# 11396

Received by

Date _____

6-17-08

ECU Control # 08-3079

No. [REDACTED]

Date Analyzed: 10-07-08

City: Boston D.C.U. Police Dept.

Officer: P.O. BRESNAHAN

Def: [REDACTED]

Subst: SUB

Amount:

No. Cont: 1 Cont: pb

Date Rec'd: 06/17/2008

No. Analyzed:

Gross Wt.: 1.73 ✓

Net Weight: 0.139
Tests: 60/65

ASR

Prelim: Unknown

Findings: Negative

DRUG POWDER ANALYSIS FORM

SAMPLE #

GENCY

Boston

ANALYST

AAG

No. of samples tested:

Evidence Wt.

✓

PHYSICAL DESCRIPTION:Signed & Sealed
1 pb w/ white powder

Gross Wt (): 1.1ng

Gross Wt (): 0.2100g

Pkg. Wt: 0.0784g

Net Wt: 0.1316

* Expedited Sample *

PRELIMINARY TESTSSpot Tests

Cobalt Thiocyanate () white

Marquis _____

Froehde's _____

Mecke's _____

Microcrystalline Tests

Gold Chloride _____

TLTA () _____

OTHER TESTS

36.8 peaks @ 3,939 + 4,278 weak
dilute

PRELIMINARY TEST RESULTS

RESULTS Unknown
DATE 9/26/08

GC/MS CONFIRMATORY TEST

RESULTS Negative
MS OPERATOR ASD
DATE 10/7/08

Sequence Table (Front Injector):

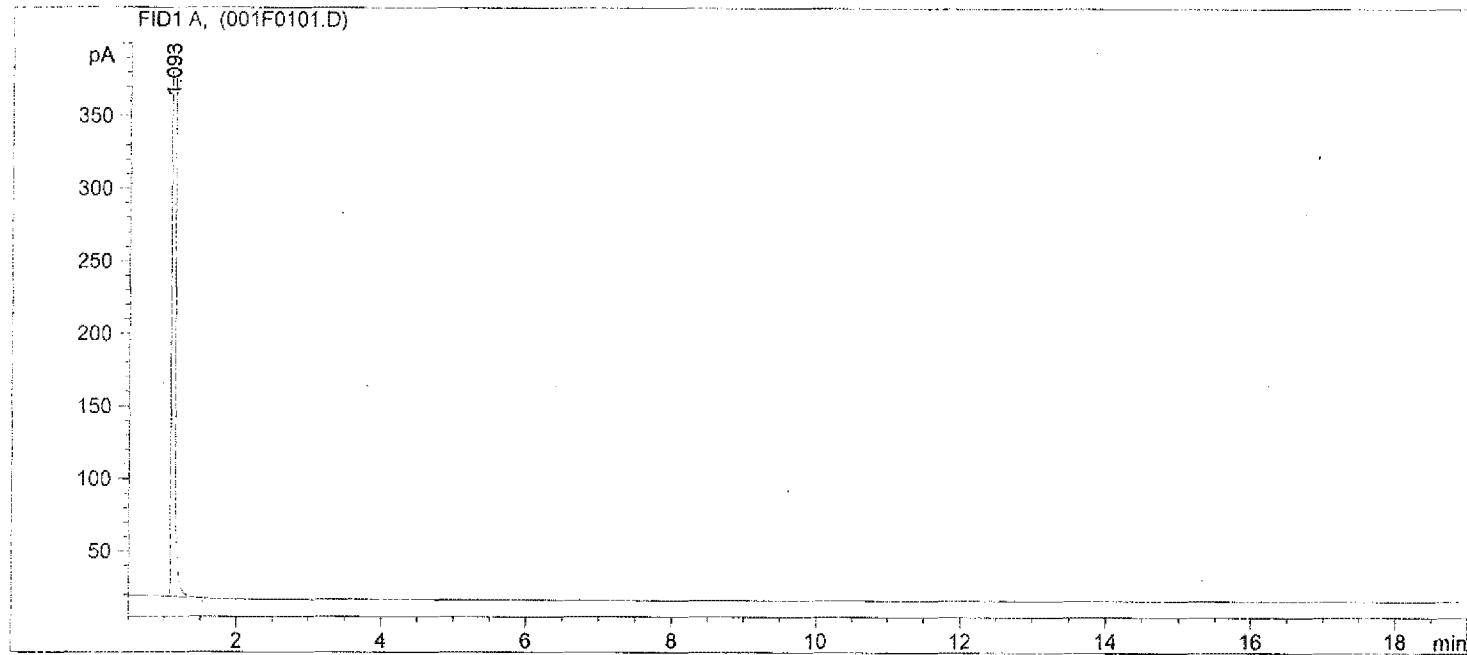
Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	=====	=====	=====	====	=====	=====	=====
1	Vial 1		GENSCAN	1	Sample	1.0	
2	Vial 2		GENSCAN	1	Sample	1.0	
3	Vial 3		WGENSCAN	1	Sample	1.0	
4	Vial 4		WGENSCAN	1	Sample	1.0	
5	Vial 5		WGENSCAN	1	Sample	1.0	
6	Vial 6		WGENSCAN	1	Sample	1.0	
7	Vial 7		WGENSCAN	1	Sample	1.0	
8	Vial 8		GENSCAN	1	Sample	1.0	
9	Vial 9		GENSCAN	1	Sample	1.0	
10	Vial 10		GENSCAN	1	Sample	1.0	
11	Vial 11		GENSCAN	1	Sample	1.0	

Sequence Table (Back Injector):

No entries - empty table!

```
=====
Injection Date : 9/26/2008 7:51:35 AM      Seq. Line : 1
Sample Name : BLANK                      Location : Vial 1
Acq. Operator : ASD                      Inj : 1
Acq. Instrument : Instrument 3          Inj Volume : 1  $\mu$ l
Sequence File : C:\HPCHEM\1\SEQUENCE\CMS.S
Method : C:\HPCHEM\1\METHODS\GENSCAN.M
Last changed : 6/29/2006 1:41:12 PM by ASD
FOR UNKNOWN SAMPLES
=====
```



```
=====
Area Percent Report
=====
```

```
Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Sample Amount : 1.00000 [fleeps] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID1 A,

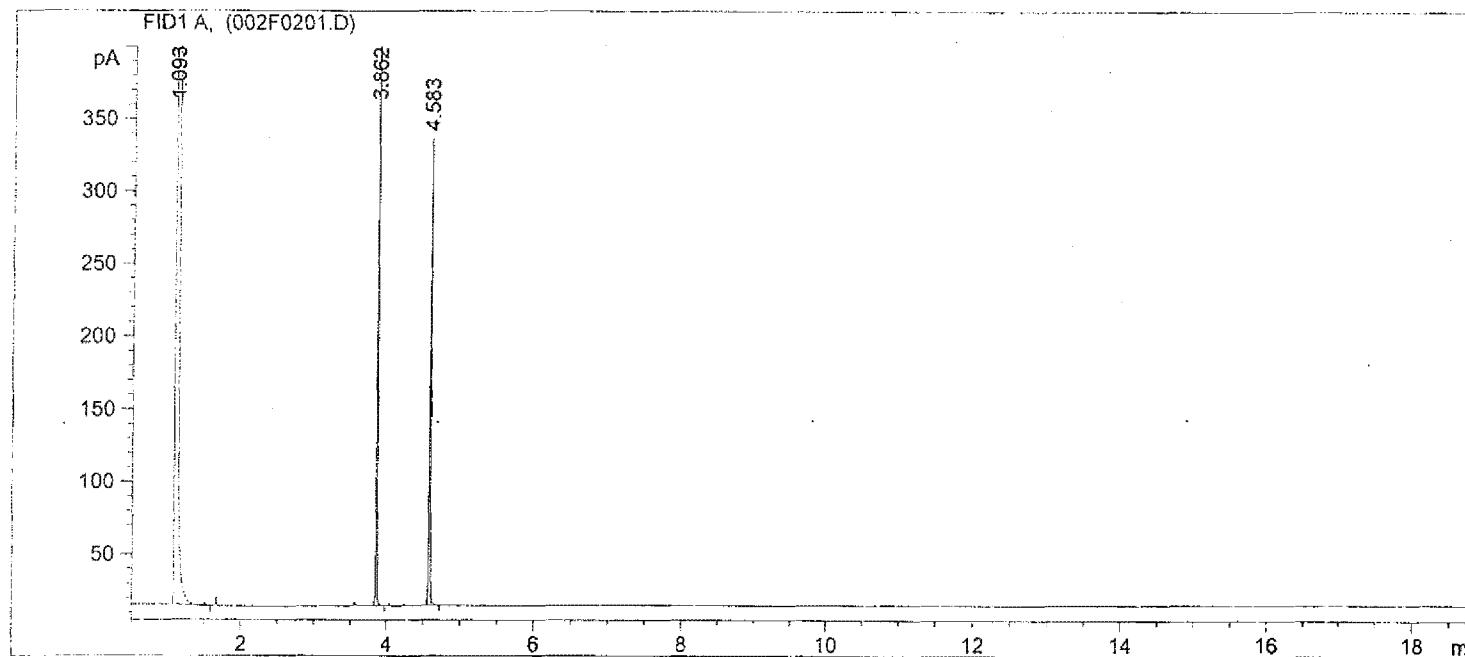
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	1.093	BB S	0.0174	1.20347e5	1.02681e5	1.000e2

Totals : 1.20347e5 1.02681e5

Results obtained with enhanced integrator!

```
=====
*** End of Report ***
=====
```

=====
 Injection Date : 9/26/2008 8:15:11 AM Seq. Line : 2
 Sample Name : COKE/COD STD Location : Vial 2
 Acq. Operator : ASD Inj : 1
 Acq. Instrument : Instrument 3 Inj Volume : 1 μ l
 Sequence File : C:\HPCHEM\1\SEQUENCE\CBS.S
 Method : C:\HPCHEM\1\METHODS\GENSCAN.M
 Last changed : 6/29/2006 1:41:12 PM by ASD
 FOR UNKNOWN SAMPLES
 =====



Area Percent Report

=====
 =====

Sorted By : Signal
 Multiplier : 1.0000
 Dilution : 1.0000
 Sample Amount : 1.00000 [fleeps] (not used in calc.)
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	1.093	BB S	0.0190	1.1581e5	1.02219e5	99.35358
2	3.862	PB	0.0136	387.39697	434.79376	0.33233
3	4.583	PB	0.0177	366.13739	322.73526	0.31409

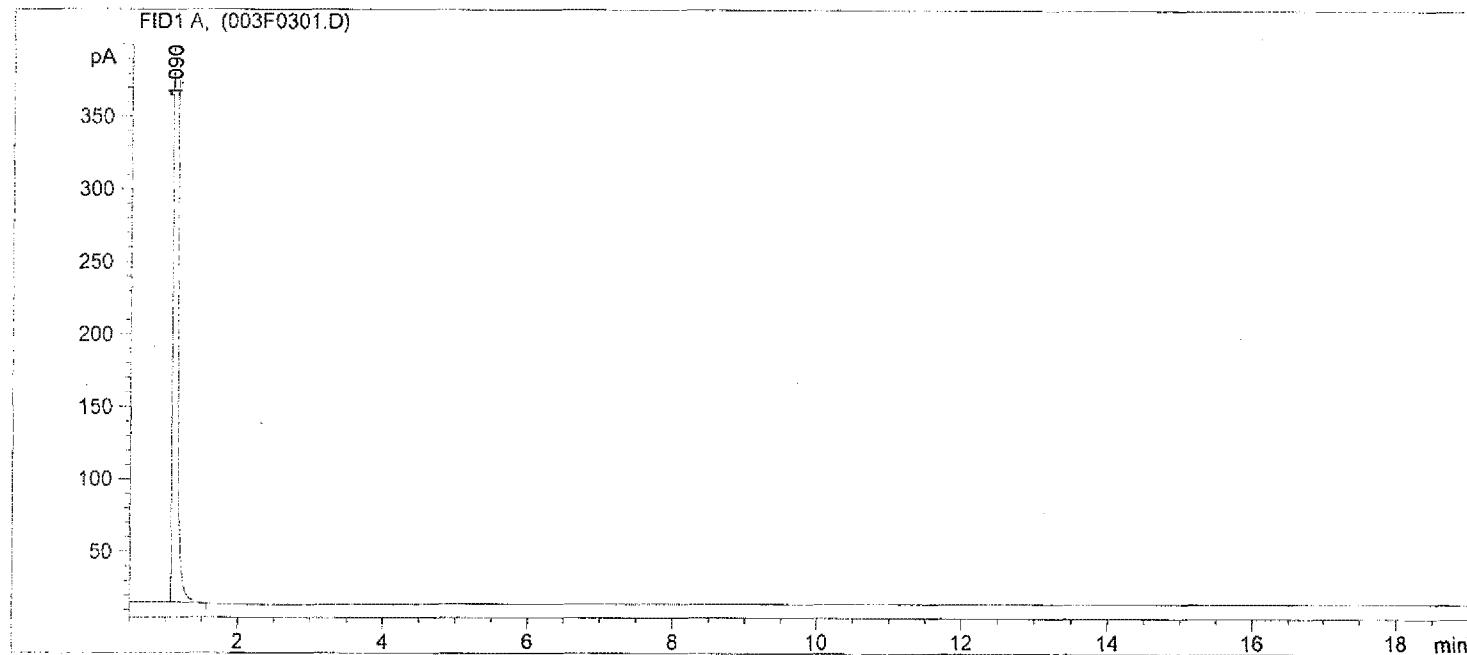
Totals : 1.16571e5 1.02976e5

Results obtained with enhanced integrator!

=====
 =====

*** End of Report ***

```
=====
Injection Date : 9/26/2008 8:38:47 AM          Seq. Line : 3
Sample Name   : BLANK                         Location : Vial 3
Acq. Operator  : ASD                          Inj : 1
Acq. Instrument : Instrument 3                Inj Volume : 1  $\mu$ l
Sequence File : C:\HPCHEM\1\SEQUENCE\CBS.S
Method        : C:\HPCHEM\1\METHODS\WGENSCAN.M
Last changed  : 3/22/2007 1:40:54 PM by ASD
FOR UNKNOWN SAMPLES
=====
```



```
=====
Area Percent Report
=====
```

```
Sorted By      :      Signal
Multiplier    :      1.0000
Dilution     :      1.0000
Sample Amount :      1.000000 [fleeps] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID1 A,

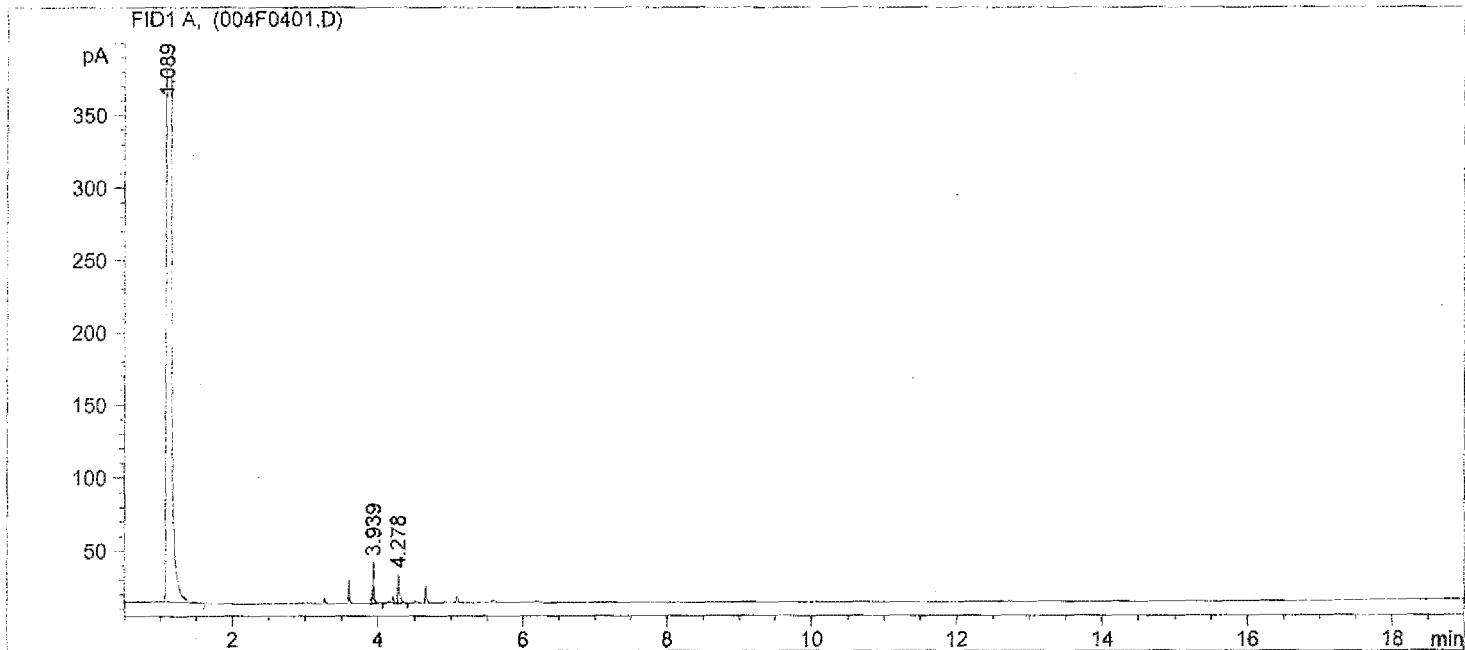
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	1.090	BB S	0.0283	2.20788e5	1.35131e5	1.000e2

Totals : 2.20788e5 1.35131e5

Results obtained with enhanced integrator!

```
=====
*** End of Report ***
=====
```

Injection Date : 9/26/2008 9:02:33 AM Seq. Line : 4
 Sample Name. : [REDACTED] Location : Vial 4
 Acq. Operator : ASD Inj : 1
 Acq. Instrument : Instrument 3 Inj Volume : 1 μ l
 Sequence File : C:\HPCHEM\1\SEQUENCE\CBS.S
 Method : C:\HPCHEM\1\METHODS\WGENSCAN.M
 Last changed : 3/22/2007 1:40:54 PM by ASD
 FOR UNKNOWN SAMPLES



=====
 Area Percent Report
 =====

Sorted By : Signal
 Multiplier : 1.0000
 Dilution : 1.0000
 Sample Amount : 1.00000 [fleeps] (not used in calc.)
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	1.089	BB S	0.0227	2.19079e5	1.42739e5	99.97146
2	3.939	BB	0.0153	28.80908	28.40330	0.01315
3	4.278	VB	0.0237	33.73588	20.28095	0.01539

Totals : 2.19142e5 1.42788e5

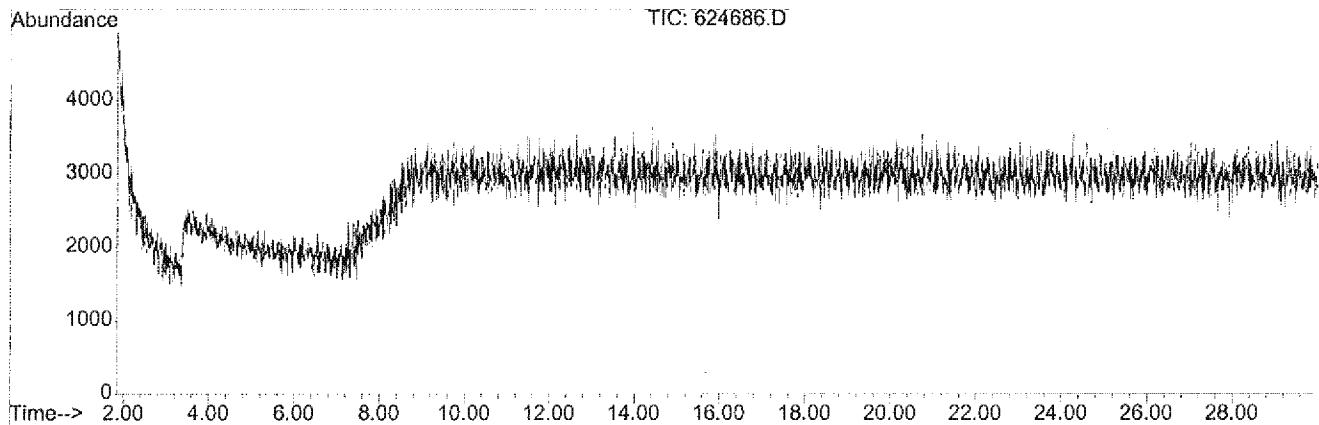
Results obtained with enhanced integrator!

=====
 *** End of Report ***

Area Percent / Library Search Report

Information from Data File:

File Name : E:\SYSTEM7\10_06_08\624686.D
Operator : ASD
Date Acquired : 7 Oct 2008 4:47
Sample Name : BLANK
Submitted by : LAG
Vial Number : 2
AcquisitionMeth: SCREEN
Integrator : RTE



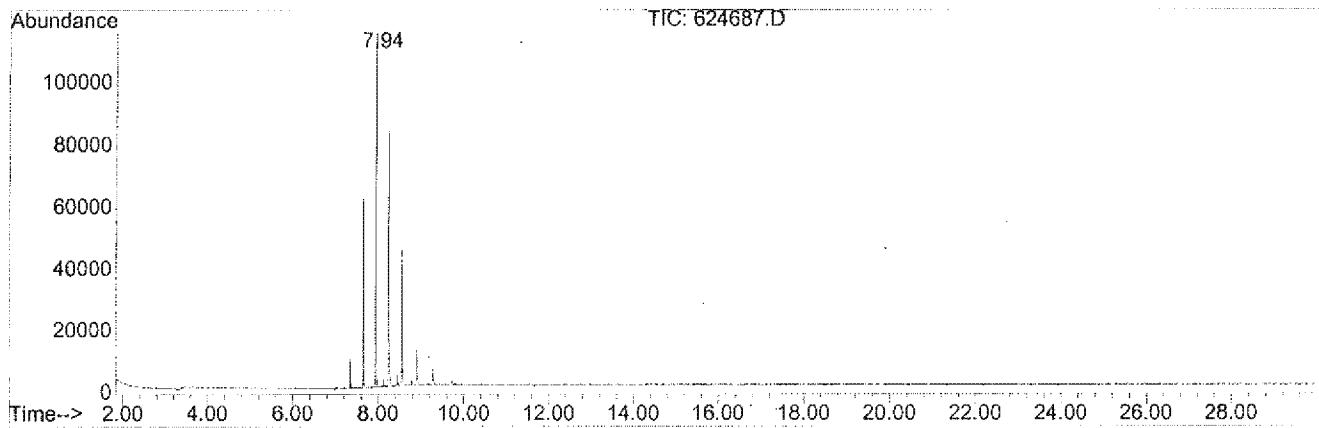
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : E:\SYSTEM7\10_06_08\624687.D
Operator : ASD
Date Acquired : 7 Oct 2008 5:21
Sample Name : XXXXXXXXXX
Submitted by : LAG
Vial Number : 87
AcquisitionMeth: SCREEN
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
7.938	103191	100.00	100.00

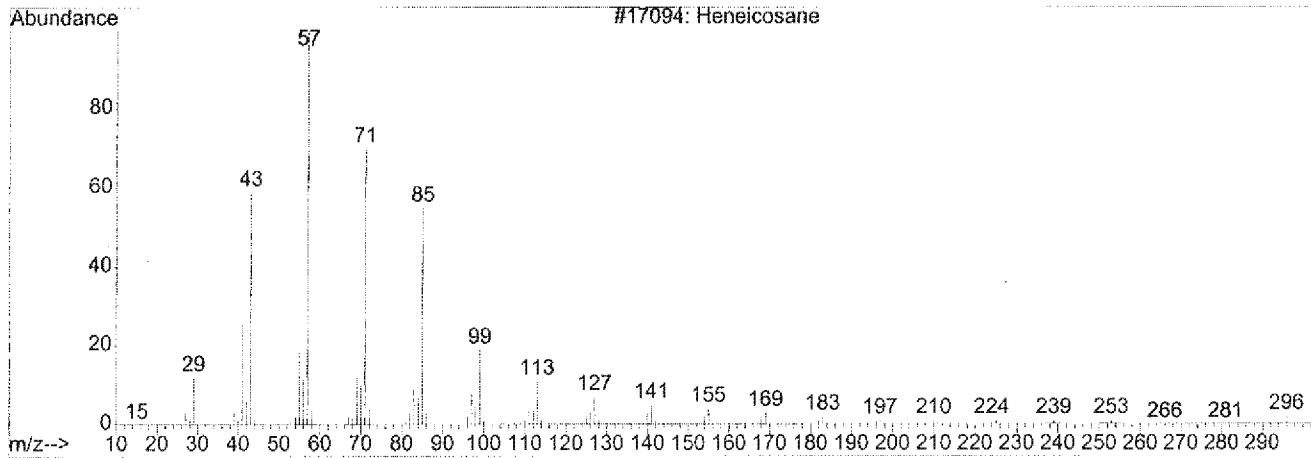
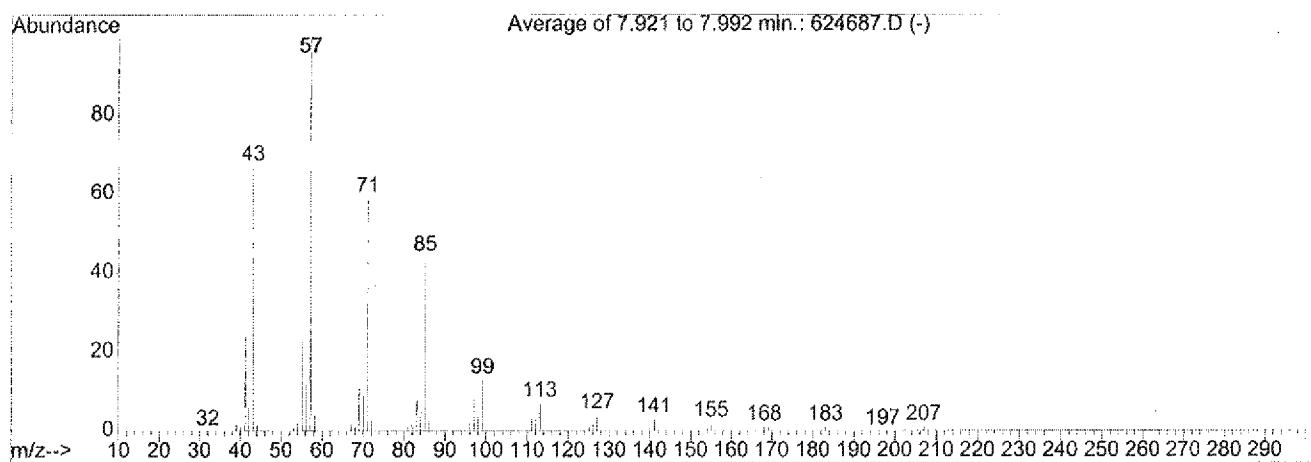
Area Percent / Library Search Report

Information from Data File:

File Name : E:\SYSTEM7\10_06_08\624687.D
Operator : ASD
Date Acquired : 7 Oct 2008 5:21
Sample Name : XXXXXXXXXX
Submitted by : LAG
Vial Number : 87
AcquisitionMeth: SCREEN
Integrator : RTE

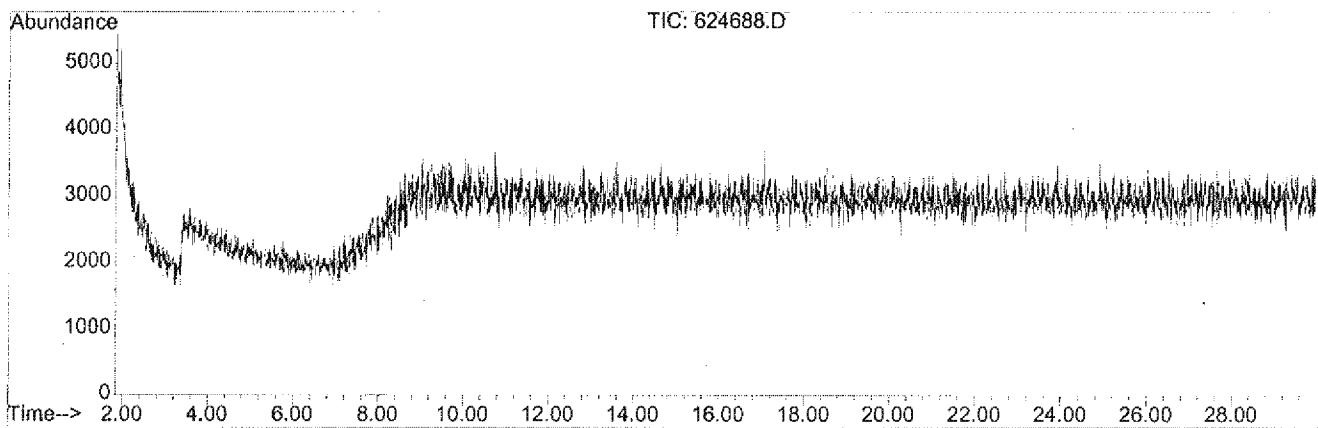
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90
C:\DATABASE\PMW_TOX2.L Minimum Quality: 90
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	7.94	C:\DATABASE\NIST98.L		
		Heneicosane	000629-94-7	90
		Tricosane	000638-67-5	90
		Heptadecane	000629-78-7	90



Information from Data File:

File Name : E:\SYSTEM7\10_06_08\624688.D
Operator : ASD
Date Acquired : 7 Oct 2008 5:55
Sample Name : BLANK
Submitted by : LAG
Vial Number : 2
AcquisitionMeth: SCREEN
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS